Straightening a Backsaw Blade

by Ted Shuck

I've had some success straightening backsaw blades.

There are two general classes of problems. One, if the blade has sharp bends in it—these need to be planished (hammered) to straighten the blade. The blade may need to be removed from the back if it is in bad shape. Two—if there is just a gentle bow or wave in the blade, it can be caused by three possible problems.

1. **The blade is not under tension from the back.** Think of the back as a long leaf spring which should keep the blade under tension at all times. If the back is pushing on the ends of the blade, though, it will cause the blade to bow. This can be corrected by putting the toe of the blade on a piece of scrap and tapping the toe of the back with a mallet. Don't whack it hard. All you want to do is drive the blade into the back an infinitesimal part of an inch so that it puts the blade back under tension.

2. **The back is bent into a wave.** You can test this by placing a straightedge along the blade right next to the back. There should be no gaps. If there are, put the back in your vise, with some padding to prevent scratches, and bend the back straight. I have found saws that have a straight line of teeth, but a bow near the back. These will start a cut fine, but will not cut straight for very far at all. It can be very frustrating to sharpen and set a saw like this and not be able to figure out why it won't cut straight for more than half an inch! DAMHIKT!

3. **The back is twisted.** If the back is straight and the blade is under tension from the back, a twist in the back can still cause the edge of the blade to bow. Put the back in your padded vise and use a large Crescent wrench to grip the blade and twist it to remove the bow. This may require gripping the blade near the heel in the vise and twisting it near the middle, then gripping it in the vise at a different spot and twisting it some place else to remove all the bow.

Through a combination of these methods, I have managed to straighten all the saws I have come across.